

Norman H. Bangerter Governor Suzanne Dandoy, M.D., M.P.H. Executive Director Kenneth L. Alkema Director

DEPARTMENT OF HEALTH DIVISION OF ENVIRONMENTAL HEALTH

M/037/032

288 North 1460 West P O. Box 16690 Salt Lake City. Utah 84116-0690 (801) 538-6121



July 27, 1990

DIVISION OF OIL, GAS & MINING

Mr. Gary Butts, Vice President Sindor, Inc. 7936 E. Arapahoe Court Englewood, CO 80112

RE:

Copper Leaching Facility
Lisbon Valley (Formerly Kelmine)

Dear Sir:

We are writing in reply to your letter of July 12, 1990, requesting information and guidance for obtaining permits to operate a copper leaching facility at the Centennial Pit in Lisbon Valley, near Moab, Utah. This was subsequent to a meeting with you and Brian Buck, JBR Consultants regarding this facility on July 3, 1990.

We understand from our previous conversation and from your letter, that you want to mine copper ore from the Centennial Pit and leach the ore with sulfuric acid on leach pads. Water from the pit will be used for part of the leaching fluid. The facility, including the leach pad, lines, ponds, and structures generally require review by the Bureau of Water Pollution Control, and result in the issuance of a ground water discharge and construction permit after approval. There are fees charged for the permits. The mining part of the operation may also be regulated by Division of Oil, Gas & Mining (DOGM).

The question was raised on the need for a ground water discharge permit for mining the existing pit. Should you be able to demonstrate that the pit water, which has a low pH and a high cadmium content is naturally occurring, then we may consider the mining part of the operation as "permitted-by-rule". To demonstrate this fact you will have to construct water level maps of the area and to collect and analyze water samples from test wells in the area. Part of the water samples will have to be from wells upgradient the pit and within the ore zone.

Mr. Gary Butts July 27, 1990 Page 2

Should you not be able to demonstrate the foregoing, it would be assumed that the low pH water is derived from weathering of sulfide minerals exposed by the mining operation. The low pH allows cadmium bearing ore to become mobilized in the ground water. It would then be necessary for the company to devise plans to control this weathering process after mining ceases. Mining operations such as these are regulated under UAC R448-6-6.1, where the operation causes ground water quality to deteriorate.

Should you wish further explanation, please call Mack Croft at 538-6146.

Sincerely,

Fred Pehrson, Manager

Permitting, Compliance & Monitoring Branch

cc:

JBR Consultants

DOGM

David Ariotti, District Engineer

MGC:kc Q:SindorInc.LTR